WHAT IS CLAIMED IS:

1. A method of reducing inflammation in a patient, comprising:

administering to a patient diagnosed as suffering from or at risk for inflammation:

(i) a pharmaceutical composition comprising nitric oxide; and

(ii) a second treatment selected from the group consisting of: inducing HO-1 in the patient using an agent other than NO; expressing HO-1 in the patient; inducing ferritin in the patient; expressing ferritin in the patient; and administering to the patient a pharmaceutical composition comprising HO-1, bilirubin, biliverdin, ferritin, iron, desferoxamine, salicylaldehyde isonicotinoyl hydrazone, iron dextran, or apoferritin;

wherein the nitric oxide and second treatment are administered in an amount sufficient to reduce inflammation.

2. The method of claim 1, wherein the pharmaceutical composition in (i) further comprises carbon monoxide.

3. The method of claim 1, further comprising: (iii) administering to the patient a pharmaceutical composition comprising carbon monoxide.

4. The method of claim 1, wherein the second treatment is inducing HO-1 in the patient.

5. The method of claim 1, wherein the second treatment is administering a pharmaceutical composition comprising HO-1 to the patient.

6. The method of claim 1, wherein the second treatment is administering a pharmaceutical composition comprising biliverdin to the patient.

7. The method of claim 1, wherein the second treatment is administering a pharmaceutical composition comprising bilirubin to the patient.

8. The method of claim 1, wherein the second treatment is administering a pharmaceutical composition comprising ferritin to the patient.

9. The method of claim 1, wherein the second treatment is administering a pharmaceutical composition comprising desferoxamine (DFO) or salicylaldehyde isonicotinoyl hydrazone (SIH) to the patient.

10. The method of claim 1, wherein the second treatment is administering a pharmaceutical composition comprising iron dextran to the patient.

11. The method of claim 1, wherein the second treatment is administering a pharmaceutical composition comprising apoferritin to the patient.

12. The method of claim 1, wherein the second treatment is inducing ferritin expression in the patient.

13. The method of claim 1, wherein the inflammation is associated with a condition selected from the group consisting of: asthma, adult respiratory distress syndrome, interstitial pulmonary fibrosis, pulmonary emboli, chronic obstructive pulmonary disease, primary pulmonary hypertension, chronic pulmonary emphysema, congestive heart failure, peripheral vascular disease, stroke, atherosclerosis, ischemia-reperfusion injury, heart attack, glomerulonephritis, conditions involving inflammation of the kidney, infection of the genitourinary tract, viral hepatitis, toxic hepatitis, cirrhosis, ileus, necrotizing enterocolitis, specific and non-specific inflammatory bowel disease, rheumatoid arthritis, cancer, wounds, Alzheimer's disease, Parkinson's disease, graft versus host disease, and hemorrhagic, septic, or anaphylactic shock.

14. The method of claim 1, wherein the inflammation is inflammation of the heart, respiratory tract, liver, spleen, brain, joint, skin, gastrointestinal tract and/or kidney.

15. A method of reducing inflammation in a patient, comprising:

administering a therapeutically effective amount of a pharmaceutical composition comprising nitric oxide and carbon monoxide to a patient diagnosed as suffering from or at

risk for inflammation associated with a condition selected from the group consisting of: congestive heart failure, peripheral vascular disease, stroke, atherosclerosis, ischemia-reperfusion injury, heart attack, glomerulonephritis, conditions involving inflammation of the kidney, infection of the genitourinary tract, viral hepatitis, toxic hepatitis, cirrhosis, ileus, necrotizing enterocolitis, specific and non-specific inflammatory bowel disease, a wound, cancer, Alzheimer's disease, Parkinson's disease, graft versus host disease, hemorrhagic shock, septic shock, and anaphylactic shock.

16. A method of transplanting an organ, a tissue, or cells, the method comprising:

(a) administering to a donor:

(i) a pharmaceutical composition comprising nitric oxide; and

(ii) a second treatment selected from the group consisting of: inducing HO-1 in the donor; expressing HO-1 in the donor; inducing apoferritin in the donor; expressing apoferritin in the donor; and administering to the donor a pharmaceutical composition comprising HO-1, carbon monoxide, bilirubin, biliverdin, ferritin, iron, desferoxamine, salicylaldehyde isonicotinoyl hydrazone, iron dextran, or apoferritin;

(b) obtaining an organ, a tissue, or cells from the donor; and

(c) transplanting the organ, tissue, or cells into a recipient, wherein the nitric oxide and second treatment administered in step (a) are sufficient to enhance survival or function of the organ, tissue, or cells after transplantation into the recipient.

17. A method of transplanting an organ, a tissue, or cells, the method comprising:

(a) providing an organ, tissue or cells of a donor;

(b) administering to the organ, tissue or cells *ex vivo*:

(i) a pharmaceutical composition comprising nitric oxide; and

(ii) a second treatment selected from the group consisting of: inducing HO-1 in the organ, tissue, or cells; expressing HO-1 in the organ, tissue, or cells; inducing ferritin in the organ, tissue, or cells; expressing ferritin in the organ, tissue, or cells; and administering to the organ, tissue or cells a pharmaceutical composition comprising HO-1, carbon monoxide, bilirubin, biliverdin, ferritin, iron, desferoxamine, salicylaldehyde isonicotinoyl hydrazone, iron dextran, or apoferritin; and

(c) transplanting the organ, tissue or cells into a recipient, wherein the nitric oxide and second treatment administered to the organ, tissue, or cells in step (b) are sufficient to enhance survival or function of the organ, tissue or cells after transplantation.

18. A method of transplanting an organ, a tissue, or cells, the method comprising:

(a) providing an organ, a tissue, or cells from a donor;

(b) transplanting the organ, tissue, or cells into a recipient; and

(c) before, during, or after step (b), administering to the recipient:

(i) a pharmaceutical composition comprising nitric oxide; and

(ii) a second treatment selected from the group consisting of: inducing HO-1 in the recipient; expressing HO-1 in the recipient; inducing apoferritin in the recipient; expressing apoferritin in the recipient; and administering to the recipient a pharmaceutical composition comprising HO-1, carbon monoxide, bilirubin, biliverdin, ferritin, iron, desferoxamine, salicylaldehyde isonicotinoyl hydrazone, iron dextran, or apoferritin, wherein the nitric oxide and second treatment administered to the recipient in step (c) is sufficient to enhance survival or function of the organ, tissue, or cells after transplantation of the organ, tissue, or cells to the recipient.

19. The method of claim 18, further comprising administering to the donor:

(i) a pharmaceutical composition comprising nitric oxide; and

(ii) a second treatment selected from the group consisting of: inducing HO-1 in the donor; expressing HO-1 in the donor; inducing apoferritin in the donor; expressing apoferritin in the donor; and administering to the donor a pharmaceutical composition comprising HO-1, carbon monoxide, bilirubin, biliverdin, ferritin, iron, desferoxamine, salicylaldehyde isonicotinoyl hydrazone, iron dextran, or apoferritin.

20. The method of claim 18, further comprising administering to the organ, tissue or cells *ex vivo*:

(i) a pharmaceutical composition comprising nitric oxide; and

(ii) a second treatment selected from the group consisting of: inducing HO-1 in the organ, tissue or cells; expressing HO-1 in the organ; inducing ferritin in the organ, tissue or

cells; expressing ferritin in the organ, tissue or cells; and administering to the organ, tissue or cells a pharmaceutical composition comprising HO-1, carbon monoxide, bilirubin, biliverdin, ferritin, iron, desferoxamine, salicylaldehyde isonicotinoyl hydrazone, iron dextran, or apoferritin.

21. A method of performing angioplasty on a patient, comprising:

(a) performing angioplasty on the patient; and

(b) before, during, or after the performing step, administering to the patient:

(i) a pharmaceutical composition comprising nitric oxide; and

(ii) a second treatment selected from the group consisting of: inducing HO-1 in the patient; expressing HO-1 in the patient; inducing ferritin in the patient; expressing ferritin in the patient; and administering a pharmaceutical composition comprising HO-1, carbon monoxide, bilirubin, biliverdin, ferritin, iron, desferoxamine, salicylaldehyde isonicotinoyl hydrazone, iron dextran, or apoferritin to the patient,

wherein the nitric oxide and second treatment are administered in an amount sufficient to treat intimal hyperplasia in the patient.

22. A method of treating naturally arising cancer in a patient, comprising:

administering to a patient diagnosed as suffering from or at risk for naturally arising cancer:

(i) a pharmaceutical composition comprising nitric oxide; and

(ii) a second treatment selected from the group consisting of: inducing HO-1 in the patient; expressing HO-1 in the patient; inducing ferritin in the patient; expressing ferritin in the patient; and administering a pharmaceutical composition comprising HO-1, carbon monoxide, bilirubin, biliverdin, ferritin, iron, desferoxamine, salicylaldehyde isonicotinoyl hydrazone, iron dextran, or apoferritin;

wherein the nitric oxide and second treatment are administered in an amount sufficient to treat cancer.

23. The method of claim 22, wherein the cancer is cancer naturally originating in a portion of a patient selected from the group consisting of: stomach, colon, rectum, mouth/pharynx, esophagus, larynx, liver, pancreas, lung, breast, cervix uteri, corpus uteri, ovary, prostate, testis, bladder, skin, bone, kidney, brain/central nervous system, head, neck, and throat.